

Preparation of adiponitrile by hydrocyanating 1,3-butadiene

Abstract

5 A process is described for preparing adiponitrile by hydrocyanating 1,3-butadiene over a catalyst, by, in a first process step, hydrocyanating 1,3-butadiene to 3-pentenenitrile over at least one nickel(0) catalyst, and, in a second process step, hydrocyanating 3-pentenenitrile to adiponitrile over at least one nickel(0) catalyst with addition of at least one Lewis acid, wherein at least one of the at least one nickel(0) catalysts used in  
10 the particular process steps is transferred into the other process step.